

division of the elements into metallics and non-metallics is the bottom classification of matter, the only one with confidence to be designated great."

Again (p. 56) :

"With this alteration (hydrogen considered as metallic) are we warranted in ascribing to this dual classification of substance that importance, both scientifically and philosophically, which we assign it? The evidence is overwhelmingly affirmative, for no known natural product exists which does not contain both classes of these elements in combination. *Matter itself must thus be sexual.*"

There is a very widely spread mineral substance composed of silicon and oxygen which forms no inconsiderable a proportion of the earth's rocky constituents, and of which the author has no doubt heard. Silica in its various forms is certainly a natural product ; and so Mr. Dewar will no doubt insist upon classifying silicon with the metals. There is also a gas composed of carbon and oxygen which is present in the atmosphere, and which is of vital importance for plant life. We should like to know how Mr. Dewar brings carbon dioxide under his "fundamental principle, which embodies one of the most salient truths in the science of the century" (p. 57).

The reader who is anxious to know how the "New Materialism" deals with the problem of life will find it disposed of in a light and airy way that might even be provocative of mirth were it not evident on every page that the author intends us to take him seriously. There is absolutely no mystery about it at all—there is no unknown force, there is no impulse different from the ordinary laws of matter. The animal is "a mere mass of conjoined magnets," containing "a virtual magnetic battery in its stomach" (p. 222). Elsewhere we are told that the plant differs from the animal in having its magnetic battery outside instead of within, and the author seems quite proud of having discovered a distinction between animals and plants that has hitherto eluded the men of science (p. 164). As for the appearance of life on the earth, it is a mere trifle to the "New Materialism" :

"Under suitable conditions of heat, light and moisture, a chance flux of suitable atoms combines sexually into vegetal molecules" (p. 159) [magnetism as before].

"Even, as on a frosty night, the surface of the ground is whitened with crystals of rime, so in many a river and ocean bed the water must often coagulate with millions of vegetal and animal cells" (p. 209).

"But as igneous activity subsided to solid quiescence, and water, soil, light and heat interacted, the protoplasmic elements—oxygen, hydrogen, carbon, nitrogen, &c.—would meet in suitable proportion, and [magnetism as before] the spontaneous production of simple organisms—protophyta, protozoa and the lowest kinds of fungi and algæ—would ensue as a matter of course, &c." (p. 246).

The origin of man is described (p. 247) in a manner that can only make the reader exclaim that the New Materialism, like a certain historical character, is *capable de tout* :—

"Man's first progenitors thus probably appeared on the earth as spontaneously produced protoplasmic cells or ovules, hundreds or thousands in number, developed by sexual and magnetic affinities from a flux of the chemical elements in some ambrosial inlet of water."

No further extracts need be given, and no further criticism is necessary to justify the opinions expressed at the beginning of this notice. R. MELDOLA.

NO. 1612, VOL. 62]

### OUR BOOK SHELF.

*Untersuchungen über Philons und Platons Lehre von der Weltschöpfung.* Von Jakob Horovitz. Pp. xiii + 124. (Marburg : N. G. Elwart, 1900.)

DR. HOROVITZ' essay is the outcome of his thesis approved for the degree of philosophy in the University of Marburg. Its purpose is to focus the rays of light which close exegesis of the *Timaeus* throws upon the cosmogonic scheme wherein Philo effected the synthesis of Plato and Moses. While recognising the Stoic and Neopythagorean elements in Philo's teaching, Dr. Horovitz has little difficulty in showing that in both style and matter the dominant influence was Plato's. It is to the analysis, then, of Plato's creation-myth that we must turn if we would understand Philo with his enormous influence on the development of the doctrine of the Logos in Christian literature.

The ζῶον νοητόν of the *Timaeus* is no mythical duplicate of the demiurge, but distinguished as *das ewige Urbild* from the latter, whose real causal activity leads to an identification with the creative reason and ideal good of earlier dialogues. The subordinate artificers of physical creation are not the ideas as distinct from the idea of good, but in part a concession to popular theology, in part perhaps due to the place of evil in Plato's system, and the fact that dualism, though overruled, is not extinguished. In his valuable and textually supported discussion of the problems, Dr. Horovitz perhaps tends to overestimate the consistency and continuity of Plato's writings, and to underestimate the *mythus* element in the *Timaeus*.

Now Philo's intelligible world or order, the work of the one day of creation before time was or the serial "days" of the production of the world of sense began, is to be assimilated to the intelligible ζῶον of Plato as modified in conception by a use of the Stoics' metaphor of architect and supra-sensual city. It is not the Logos save in the sense in which his plan is the mind of the architect. Dr. Horovitz moves familiarly among the conceptions of Logos, intelligible world, ideal man and the like, and by adjustment of the emphasis on the various clauses of Philo's commentary produces a construction which might carry conviction. The *mutata* of Philo, and the reasons why they were *mutanda* from the Platonic theory, are well brought out. The ideal man is the work of God, the physical man is the work of God in conjunction with subordinate agents, and these powers find their natural analogue in the angels of the Jewish scheme. Platonic scholars, or those of them who have not despaired of the ζῶον as unintelligible, will find food for reflection in the one side of Dr. Horovitz' study. Theologians, students of Neoplatonism, persons who take an interest in the Hegelian *Religionsphilosophie*, may well take their starting-point from the other. H. W. B.

*Fungus Diseases of Citrus Trees in Australia, and their Treatment.* By D. McAlpine. Pp. 132 ; 19 plates. (Melbourne : Brain, Government Printer, 1899.)

THIS is one of the many useful publications dealing with plant diseases issued by the Victoria Department of Agriculture. According to statistics given, the cultivation of orange and lemon trees is extending rapidly, and one successful lemon grower considers that instead of paying 62,498*l.* annually for oranges and lemons, the colony could not only produce sufficient for home consumption, but could also supply the half of Europe. Under these circumstances the appearance of a work of the kind under consideration is most opportune, more especially as it is stated to be written for the benefit of growers. It is therefore somewhat disappointing to find that a considerable portion of the text is devoted to technical descriptions of new species of fungi, a subject of no interest whatever to cultivators, more